

Araştırma Makalesi/ Research Article

Are Nurses Ready for Disasters? A Qualitative Study on Disaster Nursing Competencies in Türkiye

Hemşireler Afetlere Hazır mı? Türkiye’de Afet Hemşireliği Yeterlilikleri Üzerine Nitel Bir Çalışma

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ABSTRACT

Objective: This study aimed to identify nurses' competencies in disaster-related nursing services, determine the necessary arrangements to improve the quality of care, explore the challenges encountered in providing these services, and propose potential solutions.

Methods: A qualitative research design was employed in this study, conducted with 17 nurses actively working in a hospital in Türkiye. Data were collected in September 2024 using a personal information form and a semi-structured questionnaire. The data were analyzed through content analysis using MaXQDA software.

Results: Four main themes emerged from the data analysis: nurses' competencies in disaster situations, necessary arrangements to improve the quality of nursing care in disasters, potential challenges in the provision of nursing services during disasters, and obstacles faced by disaster nurses.

Conclusion: The findings indicate that nurses' disaster-related competencies need to be improved through continuous training programs, adequate resource allocation, and effective preparedness planning to meet basic needs.

Keywords: Disaster, nursing, disaster nurse, nursing education, qualitative research

ÖZ

Amaç: Bu çalışmanın amacı, afet hemşireliği hizmetlerinde hemşirelerin yeterliliklerini belirlemek, bakım kalitesini artırmak için gerekli düzenlemeleri saptamak, bu hizmetleri sunarken karşılaşılan zorlukları araştırmak ve potansiyel çözüm önerileri sunmaktır.

Yöntem: Türkiye’de bir hastanede aktif olarak çalışan 17 hemşire ile yürütülen bu çalışmada nitel araştırma deseni kullanılmıştır. Veriler, Eylül 2024 tarihinde kişisel bilgi formu ve yarı yapılandırılmış bir anket kullanılarak toplanmıştır. Veriler MAXQDA yazılımı kullanılarak içerik analizi ile analiz edilmiştir.

Bulgular: Veri analizinden dört ana tema ortaya çıktı: afet durumlarında hemşirelerin yeterlilikleri, afetlerde hemşirelik bakımının kalitesini artırmak için gerekli düzenlemeler, afetler sırasında hemşirelik hizmetlerinin sağlanmasında olası zorluklar ve afet hemşirelerinin karşılaştığı engeller.

Sonuçlar: Bulgular, hemşirelerin afetle ilgili yeterliliklerinin, sürekli eğitim programları, yeterli kaynak tahsisi ve temel gereksinimlerin karşılanmasına yönelik etkili hazırlık planlaması yoluyla geliştirilmesi gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: Afet, hemşirelik, afet hemşiresi, hemşirelik eğitimi, nitel araştırma

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Introduction

Disasters are natural or man-made events that occur suddenly and affect a society physically, economically, and socially (Varol and Gültekin, 2016; Gümüş et al., 2024). In addition to natural causes such as earthquakes, floods, landslides, avalanches, tsunamis, and volcanic eruptions, human or technological factors such as major industrial accidents, nuclear explosions, biological weapons, and climate change may also cause disasters. In particular, unplanned urbanization and the increase in urban population make cities more vulnerable to disasters, thereby intensifying the physical and social destruction caused by them (Şengün and Küçükşen, 2019).

Disasters affect societies not only economically and socially but also deeply in the field of health. The sudden and unpredictable nature of disasters necessitates the effective planning, coordination, and implementation of health services (Erkal and Değerliyurt, 2019; Gümüş et al., 2024). In this process, it is of great importance that healthcare teams, especially nurses, are prepared for disaster management (Magnaye et al., 2011). Rapid and effective intervention during disasters plays a critical role in saving lives (Erdal and Değerlikurt, 2019). Therefore, it is vital for all healthcare personnel to have sufficient knowledge and competence in disaster management in order to minimize the adverse effects of disasters (Akpınar and Ceran, 2020; Labrague and Hammad, 2024; Soltani Goki et al., 2023; Hasan et al., 2021).

Nurses, one of the most important parts of health services, have a very important role in disaster preparedness and response (Magnaye et al., 2011; Anderson and Beach, 2022; Li et al., 2023; Choi and Lee, 2021; Kiliç Bayageldi and Kaloğlu Binici, 2024). The high number of nurses among health personnel makes their role in disaster management even more critical (Akpınar and Ceran, 2020). Nurses and all health workers should be equipped with disaster prevention knowledge and skills and emergency plans should be established in order to reach services faster in case of a disaster (Labrague et al., 2018; Demirtaş and Altuntaş, 2024).

The focus of disaster operations is expanding from saving lives to protecting public health (International Council of Nurses and World Health Organization, 2009). Nurses are among the first responders in the disaster relief process and make important contributions to post-disaster reconstruction (Goniewicz et al., 2021; Al Harthi, 2020). All nurses participate in the prevention of

disasters, mitigation of their effects, preparedness, and response operations. Nurses, who play an active role in every stage of disaster processes, are in a key position to reduce the consequences that could negatively affect the health of the affected population (Labrague, et al., 2018; Songwathana and Timalisina, 2021). Therefore, nurses need to be prepared for disasters in order to reduce the negative impacts on the affected population (Labrague et al., 2018).

Disaster training is mandatory for nurses at all levels and enhances communities' capacity to respond effectively to disasters and public health emergencies (Langan and Moore, 2024). Nurses play a key role in providing disaster preparedness training to individuals of all ages, and the preparations made before a disaster help to minimize its negative impacts during and after the event. Qualitative studies examining nurses' competencies and the challenges they face in disaster management are limited in Turkey. Therefore, this study was conducted to explore nurses' experiences in disaster processes and to develop strategies to improve the quality of nursing services.

Methods

Study Type

The research was conducted in 2024 using qualitative research method. Qualitative research is an approach that allows to investigate and analyse social phenomena within their environment (Savan, 2017). Given the importance of understanding the experiences of nurses as a key component of the health sector, particularly in the context of disaster management, a phenomenological approach was employed as one of the qualitative research designs. Phenomenological design is best suited for studying people's feelings, thoughts and experiences (Kalanlar and Kubilay, 2015). Interviews were conducted with the participants individually and using a semi-structured interview form.

Participants

The study sample consisted of nurses employed at Yozgat Bozok University Research and Training Hospital in September 2024. The study population included all nurses working at the hospital, while the sample comprised those who met the inclusion criteria and agreed to participate in the study ($n = 17$). In the study, 17 nurses who were actively working in the nursing profession and volunteered to participate were included (Table 1). The

participants in the study were coded as P1, P2, ...,P17.

Participants were selected using the criterion sampling technique, consistent with the qualitative

research methodology. The inclusion criteria for the study were being a nurse and having at least two years of professional experience.

Table 1. Demographic Characteristics of Participants

Participant s Code	Age	Professional Experience	Gender	Education Level	Place of Interview
P1	32	10	Female	Postgraduate Education	Participating Workplace
P2	35	12	Female	Postgraduate Education	Participating Workplace
P3	39	15	Male	Postgraduate Education	Participating Workplace
P4	25	3	Male	Undergraduate	Participating Workplace
P5	26	3	Male	Undergraduate	Participating Workplace
P6	36	9	Female	Postgraduate Education	Participating Workplace
P7	24	2	Female	Undergraduate	Participating Workplace
P8	26	2	Female	Undergraduate	Participating Workplace
P9	34	14	Female	Undergraduate	Participating Workplace
P10	26	4	Female	Undergraduate	Participating Workplace
P11	25	7	Male	Undergraduate	Participating Workplace
P12	50	30	Male	Postgraduate Education	Participating Workplace
P13	26	4	Female	Undergraduate	Participating Workplace
P14	36	14	Female	Undergraduate	Participating Workplace
P15	36	12	Male	Undergraduate	Participating Workplace
P16	29	11	Female	Undergraduate	Participating Workplace
P17	47	20	Female	Undergraduate	Participating Workplace

Data Collection

In this study, a semi-structured interview form was used to explore participants' experiences, perceptions, opinions, feelings, and thoughts in depth. The interviews were conducted face-to-face by the researcher and each interview lasted approximately 30–40 minutes. With the participants' consent, the interviews were audio-recorded and subsequently transcribed verbatim by the researcher. The data collection process was concluded after 17 interviews, as data saturation was reached and no new information emerged. Written informed consent was obtained from all participants. The interviews were conducted in settings that were convenient and comfortable for the participants. Data were collected using a personal information form, which included questions on the participants' socio-demographic characteristics, and a semi-structured interview form. The interview questions focused on the following topics:

- What are your thoughts regarding your competence to provide nursing care in disaster situations?

- What measures should be implemented to improve the quality of nursing services in disaster settings?

- What challenges might you face while providing nursing services during disasters?

- What should be done to overcome these challenges in disaster situations?

Data Analysis

Data analysis was conducted concurrently with data collection. In the study, data collection and analysis were carried out simultaneously, and thematic analysis, as a subtype of content analysis, was employed as the qualitative data analysis method. Initially, all data collected through audio recordings were transcribed verbatim by the researchers to facilitate analysis. The transcribed field notes were first independently coded by the researchers using the MAXQDA qualitative

research analysis software. In the subsequent process, the codes were compared. After comparing the codes and making necessary adjustments, a faculty member with expertise in qualitative research was consulted to review the field notes and codes. Based on this evaluation, the researchers re-evaluated the codes and derived themes from the finalized codes. The themes were finalized after obtaining expert feedback from a faculty member experienced in qualitative research.

Validity and Reliability

The reliability and validity of the data were ensured according to the evaluation criteria established by Lincoln and Guba (Jang and Cho, 2022). The criteria are credibility, transferability, reliability and verifiability. In order to ensure the credibility of the research, the participants were asked to evaluate the interviews related to them. In terms of transferability, all stages of the research process (sampling, data collection tool, data collection period, etc.) were presented in detail. In the reliability stage, careful coding was carried out in the data collection and analysis stages in line with the purpose of the research. Finally, in order to ensure verifiability, the codes obtained by the researchers and the categories extracted by the researchers were presented in detail.

Ethical Approval

The ethical approval was obtained from the Yozgat Bozok University Ethics Committee of Social and Human Sciences (July 11, 2023/05/20). Additionally, informed consent forms were obtained from the nurses who volunteered to participate in the study.

Results

After analysing the data, four themes were identified: nursing competence in disasters, necessary arrangements to improve the quality of nursing services in disasters (sub-themes: training planning, development of a disaster management plan), difficulties that may be encountered while providing nursing service in disasters, (sub themes: difficulties in meeting basic needs, lack of physical environment and material, psychological difficulties, absence of disaster gestion plan), and necessary actions to address the challenges faced by nurses in disasters (sub-themes: disaster planning).

• Nursing Competence in Disasters

In accordance with participant comments, nursing competence in disasters emerged as the main theme of the study. When asked about their ability to provide nursing services in disaster

situations, 8 out of 17 participants indicated that they felt competent, while 7 reported feeling incompetent. Additionally, 2 participants expressed that they were competent in certain areas but lacked competence in others.

Participants P8 and P10 indicated that their competence was bolstered by the units they worked in and their experiences. Their comments are as follows:

"I work in the pediatric emergency unit. I believe I possess skills related to emergencies. I also became a National Medical Rescue Team volunteer to enhance my capabilities in disaster situations." (P8)

"I think I will be able to provide effective service in disaster areas due to the intensity of the treatment practices at my workplace and my proficiency in vascular access." (P10).

Conversely, P15 and P2 expressed feelings of inadequacy. P15 emphasized the lack of equipment and planning, while P2 highlighted deficiencies in theoretical, practical, and psychological preparation:

"I believe I will face difficulties in providing nursing care during disasters because I lack competencies in areas such as teamwork, cooperation, and planning." (P15)

"I think I have the theoretical and practical competencies needed to provide nursing services in disasters." (P2)

• Necessary Arrangements to Improve the Quality of Nursing Services in Disasters

The second theme was categorised as two sub-themes: (2.1) improving disaster nursing education programmes and (2.2) improving disaster management planning.

-Development of Disaster Nursing Training Programmes

The most emphasised issue by the participants in terms of increasing the quality of nursing in disasters was training. One of the participants, P4 drew attention to undergraduate education with the statement *"Keeping more students at the forefront of the trainings to be given at the undergraduate level will be useful in increasing the quality of the nursing service that can be provided in the future."*

The participants emphasised that in-service trainings for health personnel would increase the effectiveness of nurses in disaster processes and stated that these trainings should be implemented regularly. P10 stated that comprehensive first aid trainings should be given after undergraduate education and organised by hospitals at certain intervals: *"I think that first aid trainings should be*

given more comprehensively. I also think that hospitals should organise these trainings at certain intervals." (P10).

P7 emphasised the importance of professional seminars, conferences and in-service trainings for nurses to provide effective service in case of disaster and stated that current training and technologies should be followed. P7's comment: *"Current trainings and technologies should be followed. Professional seminars, conferences and in-service trainings can be provided for nurses to provide better quality service in case of disaster."*

-Improvement of Disaster Management Planning

Participants emphasised that a good disaster management plan should be established in advance to improve the quality of nursing service in disasters. In these plans, the risks that may be encountered during a disaster and solutions should be clearly stated. One of the participants, P2, stated that a disaster action plan should be established in order to increase the quality of nursing in disasters with the comment *"In order to increase the quality of nursing in disasters, it is necessary to establish pre-disaster action plans in the dimension of nursing services, and nurses should be supported in terms of technical and theoretical knowledge they will need within the scope of intervention in disasters."* (P2)

The possibility of damaging the facilities that will provide health services during the disaster should be taken into consideration and it should be ensured that the need for personnel from other regions is met quickly within the framework of disaster planning. P1 emphasised the importance of rapid access of nurses to the disaster area and rapid provision of the needed materials: *"Effective planning is very important in the disaster process. In addition, it should be ensured that the necessary materials are delivered together with the nurses by receiving feedback from the disaster area and field hospitals should be established quickly when necessary."*

• Difficulties That May be Encountered While Providing Nursing Service in Disasters

The third theme was categorised into four sub-themes (3.1) difficulties in meeting basic needs, (3.2) physical environment and material deficiencies, (3.3) psychological burden and difficulties, and (3.4) deficiencies in disaster management planning.

-Difficulties in Meeting Basic Needs

The participants expressed concerns about the insufficient provision of basic needs, such as shelter

and nutrition, in disaster-affected areas. P9 emphasized issues related to accommodation, nutrition, and sleep, while P10 pointed out challenges related to hygiene. The participants' comments were as follows:

"(...) We may experience problems related to our basic needs such as sleep, nutrition, and shelter." (P9)

"We may face difficulties regarding personal hygiene in the disaster area. There may be shortcomings in accommodation and nutrition." (P10)

-Lack of Physical Environment and Materials

The magnitude of the disaster and the extent of the affected area can lead to a lack of materials. This situation is one of the biggest challenges faced by nurses providing health services to disaster victims. Most participants noted that working with insufficient materials in the disaster area is a significant problem. Some comments from the participants regarding this theme are as follows:

"During a disaster, we will be unprepared for the conditions in the environment. The physical conditions and materials during service may be inadequate..." (P2)

"The limitations of resources in the disaster area, lack of materials, and the inability to ensure a sterile environment are some of the challenges encountered while providing care." (P4)

-Psychological Burden and Challenges

Disaster-affected areas can create challenging working conditions depending on the magnitude and impact of the disaster, leading to various psychological difficulties for the assigned personnel. Participant P3 highlighted this issue, stating, *"If the psychological resilience of the personnel assigned to the disaster area is inadequate, they may experience trauma, which can negatively affect the process."* Another important point is the potential for a new disaster to occur in the affected area, which can further strain the psychological resilience of both personnel and their family members. Participant P1 remarked on this situation: *"We may encounter another disaster in the disaster area, and this can adversely affect both our psychology and that of our family members."* (P1)

-Deficiencies in Disaster Management Planning

The majority of participants emphasized the lack of organization as a significant challenge encountered in disaster areas. Some comments from participants regarding this subtheme are presented below:

"There may not be a good organization when we arrive at the disaster area. This can delay or hinder our ability to provide services in that region." (P1)

"We may encounter a lack of coordination." (P12).

• Necessary Actions to Address the Challenges Faced by Nurses in Disasters

The fourth theme is categorized as a sub-theme: (4.1) "Improvement of Disaster Planning.

-Improvement of Disaster Planning

The difficulties that nurses may face in disaster areas can be listed as follows in line with the comments of the participants: shelter and nutrition problems, lack of equipment, lack of training, lack of organisation and psychological problems. In order to cope with these difficulties, an effective planning is required.

It is seen that many ministries play an active role in disaster areas. While P11, one of the participants, emphasised on the supply of materials like the other participants in his comment, he stated that the higher authorities should play an active role in the disaster process and the duties and authorities should be clearly defined. The participant comment is as follows;

"Teaching a good plan, programme and implementation process ensures a strong crisis management in practice. The people who will do this job should be selected from people who have the ability to produce practical solutions and have a calm structure. The higher authorities should work together with the team in order to reach the problems in the disaster area immediately and find solutions. The duties, authorities and responsibilities should be determined beforehand." (P11)

Another issue mentioned by the participants as a solution to the difficulties that may be encountered in the disaster process is education. P3 stated that courses related to disaster nursing should be added to the curriculum especially in undergraduate education : *"A compulsory disaster nursing course should be added in undergraduate education. Psychological resilience of nurse candidates should be supported in the mental health course. First aid course should be compulsory after graduation. Stitching in emergencies should be taught in the surgery course. Membership to nursing associations should be made" (P3).*

Discussion

This study aimed to identify nurses' competencies in disaster-related nursing services,

determine the necessary arrangements to improve the quality of care, reveal the challenges encountered in providing these services, and propose possible solutions. As a result of the analysis, four themes were identified: (1) nursing competence in disasters, (2) necessary arrangements to improve the quality of nursing services in disasters, (3) difficulties that may be encountered while providing nursing service in disasters, (4) necessary actions to address the challenges faced by nurses in disasters.

As a result of the research, 8 of the 17 participants stated that they were competent in providing nursing services during disasters, 7 considered themselves incompetent, and 2 indicated they were competent in some areas but lacking in others. This finding suggests that nurses disaster preparedness competence is influenced by individual experience, educational level, and previous disaster exposure. A study conducted by Jiang et al. (2022) on intensive care nurses found that participants had a moderate level of disaster nursing competence, which could be enhanced through continuous training. Chegini et al. (2022) reported that nurses with a bachelor's degree had lower basic disaster competencies compared to those with a master's or doctoral degree. Similarly, a study by Küçük et al. (2023) in a tertiary university hospital found that nurses perceived themselves as partially competent in disaster preparedness. Kaviani et al. (2022) concluded that nursing students' competencies in disaster situations were weak. However, other studies have found that nurses possess a high level of disaster preparedness (Abou and Banona, 2023; Emaliyawati et al., 2021; Azizpour et al., 2022). The varying results reported in the literature indicate that disaster preparedness levels may be influenced by factors such as country, institutional context, and educational background.

Nurses should be equipped with sufficient knowledge and skills to cope with different emergencies and disasters (Said et al., 2022). It is a necessity to design holistic and effective disaster education programmes in order to provide effective disaster care (Lin et al., 2023). Effective intervention in disasters requires both personal and professional skills. Therefore, it is essential that healthcare workers assigned to disaster areas are trained in disaster management and have volunteered for these roles. Since the timing and scale of disasters are unpredictable, healthcare workers should undergo practical training beforehand. Repetition of trainings at certain

intervals is important in terms of reinforcing disaster trainings of health professionals and updating their knowledge. In a study conducted on nurses, it was concluded that continuous training opportunities for disaster nursing should be increased (Yeşildal, 2020). In a study conducted in Nepal, it was determined that disaster nurses had difficulties due to limited access to education and training opportunities (Paudel and Kamdara, 2023). Participant perspectives reveal findings consistent with the literature, highlighting the need for disaster nursing education programs. In this context, the effectiveness of healthcare services provided during disasters is directly dependent on the integration of continuous, practical, and comprehensive training programs that enhance nurses knowledge, skills, and experience.

The participants emphasized that disaster-related training should be standardized, repeated at regular intervals, and conducted on a voluntary basis. They also highlighted the necessity of establishing well-structured disaster management plans and specialized disaster nursing units to ensure effective coordination and preparedness during disasters. These findings are consistent with the literature and underscore the importance of strengthening both educational and institutional capacities to improve the quality of nursing services in disaster situations. In the study conducted by Liden and Proceş, the importance of leadership roles, practical training, and institutional support in enhancing nurses' disaster competencies was emphasized. It was stated that removing barriers such as limited training opportunities and resources is critical for strengthening preparedness (Liden and Proceş, 2025). In the study conducted by Taş et al. (2020), it was emphasized that activities aimed at enhancing the preparedness of nurses for disasters in Turkey and other countries need to be increased (Taş et al., 2020). Additionally, it has been stated that these activities should be integrated into nursing curricula and training programs and structured to include fundamental concepts such as disaster literacy, disaster resilience, and leadership. Nurses, who play a critical role in disaster situations, must be adequately prepared and possess strong knowledge of disaster response in order to mitigate the negative impacts on affected populations, particularly as the frequency of global disasters continues to rise (Taş and Çakır, 2022). Disaster preparedness in nursing schools is becoming increasingly important as an integral part of the nursing curriculum (Anderson and Beach, 2022). Well-designed education

programs will help to build a more secure and prepared workforce capable of responding more effectively to disasters (Songwathana and Timalisina, 2021). Previous studies have indicated that higher levels of disaster literacy are associated with greater disaster preparedness among nurses (Erkin and Kiyani, 2025).

Various natural events such as floods, earthquakes, droughts, hurricanes, soil erosion and landslides frequently affect cities around the world. Many countries are vulnerable to natural disasters and this situation negatively affects the lives of millions of people (Şen and Ersoy, 2017). In this context, individuals who contribute to the improvement of this process should be well educated. The participants comments further support this finding. For instance, participant P5 stated: "In-service training should inform nurses about the situations they may encounter during a disaster. Trainings should be provided in advance regarding the orientation processes to be implemented in disaster situations. Additionally, communication with disaster victims should be reinforced through these trainings" (P5). This remark underscores the necessity of in-service training to ensure nurses' preparedness for disaster response and highlights the importance of enhancing both communication and orientation competencies during disaster interventions. Education is one of the most important elements that enable individuals to live in harmony with others and their environment. It is observed that many problems occurring in any field at the global level are primarily caused by wrong practices in the education process (Loke and Fung, 2014). Therefore, organisations should plan the necessary training for disaster preparedness.

Nurses play a critical role in organizational risk assessment, preparation, implementation, evaluation, and updating of disaster plans. Therefore, increasing nurses' knowledge and skills on disaster management is necessary to improve the quality of nursing services (Labrague et al., 2018). It is important for all healthcare professionals to receive training in various courses, drills, and exercises related to health services during and after their professional training. Feedback from the participants in this study also emphasizes the need for disaster-related training for nurses and the importance of allocating specific time for these trainings to be conducted by individuals actively involved in disasters.

The type of training nurses receive plays a significant role in the effectiveness of disaster

education. Especially in practical areas, training should be delivered face-to-face rather than remotely. Face-to-face training supported by hands-on practice leads to more lasting learning. Providing such training is essential to improving the quality of nursing care during disasters. The feedback from participants in this study also emphasizes the importance of face-to-face and practical training in disaster nursing. In the study conducted by Ulupınar and colleagues, it was also highlighted that existing training programs need to be reevaluated and more scenario-based approaches should be implemented to adequately prepare nurses for the realities of disaster response (Ulupınar et al., 2024). Volunteerism is another important factor emphasized by some participants in this study. The study by Şen and Ersoy demonstrated that voluntary participation in trainings increased the knowledge level of the disaster team (Şen and Ersoy, 2017). The participants in this study also highlighted the importance of volunteerism in disaster-related trainings.

Psychological challenges faced by nurses in disaster environments constitute a significant barrier to the delivery of effective nursing care. The findings of this study revealed that repeated exposure to disasters may cause psychological stress among nurses, which can negatively affect both job performance and the quality of care provided. This result is consistent with similar findings in the literature. Segev et al. (2024) emphasized that nurses requested psychological support following disaster interventions, while Zahos et al. (2022) stated that it is essential to provide both short- and long-term psychological support to personnel involved in disaster processes (Segev et al., 2024; Zahos et al., 2022). Similarly, Açıık and Sevim (2025) found that nurses experienced various psychosocial problems such as emotional burden, feelings of inadequacy, safety concerns, and difficulties in post-disaster recovery (Açıık and Sevim, 2025). In the study conducted by Song et al., it was also concluded that nurses experienced significant psychological pressure during disaster interventions (Song et al., 2025). When these findings are evaluated together, it is evident that the psychological well-being of nurses working in disaster settings plays a critical role in the effectiveness of disaster response. Accordingly, integrating content aimed at enhancing psychological resilience into disaster nursing training programs is of great importance for

strengthening disaster preparedness capacity at both the individual and institutional levels.

Conclusion and Recommendations

This study provides in-depth insights to the literature by examining the experiences and challenges of nurses actively involved in disaster processes from a qualitative perspective. The results of the study revealed that nurses' competencies in disaster preparedness were insufficient in many areas, and this insufficiency was largely related to the type, quality, and continuity of disaster-related training. Therefore, individuals assigned to health personnel in disaster areas should be volunteers who have received training on the disaster process. Given that disasters can occur at any time and of any magnitude, health personnel should undergo practical training in advance. Periodic repetition of training is also important for reinforcing health personnel's disaster training and updating their knowledge.

The study fills a gap in the limited qualitative research on disaster nursing in Turkey and provides recommendations to enable nurses to take a more active and effective role in disaster management. In line with the results of the study, some duties and responsibilities should be given to nurses to be more active and effective in disaster processes. In addition, plans should be made to give basic trainings to nurses in disaster processes in a practical way in certain periods. It is important to integrate more subjects such as disaster preparedness, triage practices and emergency intervention into nursing curricula. The Ministry of Health should organise compulsory training programmes on disaster. Nurses work under intense stress during and after disasters. This situation may cause occupational burnout. For this reason, trainings on psychological resilience and stress management should be planned for nurses who will take an active role in disasters.

The findings are of such a nature that they can guide both the design of policy and education programmes and the improvement of the quality of healthcare services provided to disaster victims. In this way, nurses' disaster preparedness capacity can be strengthened, thereby increasing the effectiveness and sustainability of healthcare services in disaster management.

Limitations of the Study

This study has some limitations. Firstly, due to the nature of qualitative research, causal relationships between variables cannot be

established, and the findings cannot be generalized to different samples. A mixed-methods research approach could address this limitation. The research was conducted on nurses who were not actively involved in disaster areas. In the future, interviews with nurses and other healthcare professionals actively involved in disaster areas could provide different perspectives and comparisons.

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What did the study add to the literature?

- As a result of the research, the main topics of the problems experienced by nurses who play an active role in disaster processes were identified.
- Disaster nursing is an important issue that countries need to focus on.
- The study examines the experiences of nurses actively involved in disaster processes from a qualitative perspective, providing in-depth insights to the literature.
- The study indicates that integrating disaster preparedness into the nursing curriculum can enhance nurses' readiness for disasters.
- The study findings serve as a guide for policymakers and educators to improve the quality of healthcare services for disaster-affected populations and to define effective nursing roles in disaster management.

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